

WILDLIFE HABITAT EVALUATION GUIDE

SMALL MAMMALS

Date of Survey _____ Time Start _____ Time End _____
Observer/Recorder _____ Weather _____
Name of landowner _____ Location _____
Current land-use practice/irrigation method _____
Project-related changes _____

GROUP MODEL

Representative Species: Black-tailed jackrabbit, Botta's pocket gopher, and Western harvest mouse.

Habitat: All prefer open grass/forb stages of all plant communities.

Special Habitat Requirements: The jackrabbit requires scattered shrubs for cover in open areas. Pocket gophers require friable soils deep enough for burrowing.

Food Habits: Jackrabbits eat a variety of grasses, forbs, shrubs, and cultivated crops. Pocket gophers feed on roots, tubers, bulbs, stems, and seedlings. Harvest mice take eats seeds and fruits of grasses, forbs, and shrubs.

HABITAT INVENTORY

RATING

a. Cropland Quantity and Quality

a. _____

Percent of area in cropland:

51 – 70%	= 1.0
31 – 50% or 71 – 90%	= 0.5
11 – 30%	= 0.3
0 –10% or 91 – 100%	= 0.1

Deduct 0.3 - 0.5 points for any heavy (e.g., moldboard plow) tillage, burning, grazing, or other destruction of crop residue, or pesticide application that would reduce cover and food supply.

Rationale: Farming practices that minimize soil disturbance and retain adequate ground cover are compatible with the habitat requirements of many small mammals in this group.

b. Herbaceous Vegetation Quantity and Quality

b. ____

Percent of area with uncultivated herbaceous vegetation:

61 – 80%	= 1.0
41 – 60% or 81 – 100%	= 0.5
21 – 40%	= 0.3
0 – 20%	= 0.1

Deduct 0.3 - 0.5 points for any heavy (e.g., moldboard plow) tillage, burning, grazing, or other loss of herbaceous cover that would reduce cover and food supply.

Rationale: Habitats dominated by herbaceous vegetation provides excellent habitat for most members of this group.

c. Woody Vegetation Quantity and Quality

c. ____

Percent of area with woody vegetation (shrubs and trees):

11-30%	= 1.0
0-10% or 31-50%	= 0.5
51-70%	= 0.3
71-100%	= 0.1

Rationale: Few small mammals in the study area require woody vegetation. However, a limited amount of shrub cover can be beneficial as shelter from potential predators.

d. Interspersion of Vegetation Types

d. ____

Avg. distance between vegetation types <100 feet	= 1.0
Avg. distance between vegetation types 100-200 feet	= 0.5
Avg. distance between vegetation types > 300 feet	= 0.3

Rationale: Most members of this group have very small home ranges and will not travel long distances between vegetation types.

e. Human Disturbance e. _____

Infrequently used roads; no occupied dwellings in study area; urban development at least 1/2 mile away; = 1.0

Occasionally used roads; 1 occupied dwelling per 40 acres; urban development 1/4 - 1/2 mile away; = 0.5

Study area <40 acres; contains 2 or more occupied dwellings or frequently used roads; within 1/4 mile of urban development; = 0.3

Rationale: Human activity and harassment can sometimes deter members of this group from otherwise suitable habitat.

f. Lakes, Ponds, Wetlands, Streams f. _____

Avg. distance from any point in study area to perennial lake, pond, stream or other wetland is <1/4 mile = 1.0

Avg. distance from any point in study area to perennial stream or wetland is 1/4 - 1/2 mile or average distance from any point in study area to seasonal stream or wetland is <1/4 mile = 0.5

Avg. distance from any point in study area to perennial wetland is 1/2 - 1 mile or average distance from any point in study area to intermittent lake, pond, stream, or wetland is 1/4 - 1/2 mile = 0.3

Avg. distance from any point in study area to a perennial wetland is greater than 1 mile or average distance from any point in study area to intermittent wetland is 1/2-1 mile = 0.1

Rationale: Most small mammals in the study area do not have a requirement for open free water and are not associated with wetland habitats. Bats, however, commonly drink and feed in wetlands.

HABITAT VALUE

$$\text{Habitat value} = \frac{\text{Total Rating}}{\text{No. of inventory factors rated}} =$$

LIMITING FACTORS

ENHANCEMENT OPPORTUNITIES